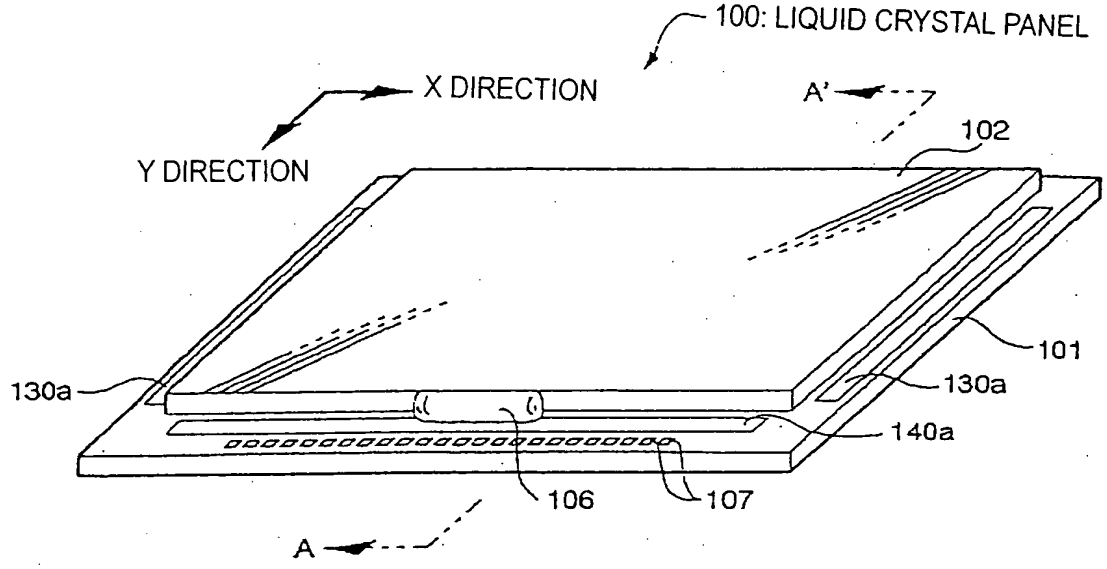
FIG. 1

(a)


100: LIQUID CRYSTAL PANEL
X DIRECTION
Y DIRECTION
A'
102
101
130a
130a
140a
106
107
A

(b)

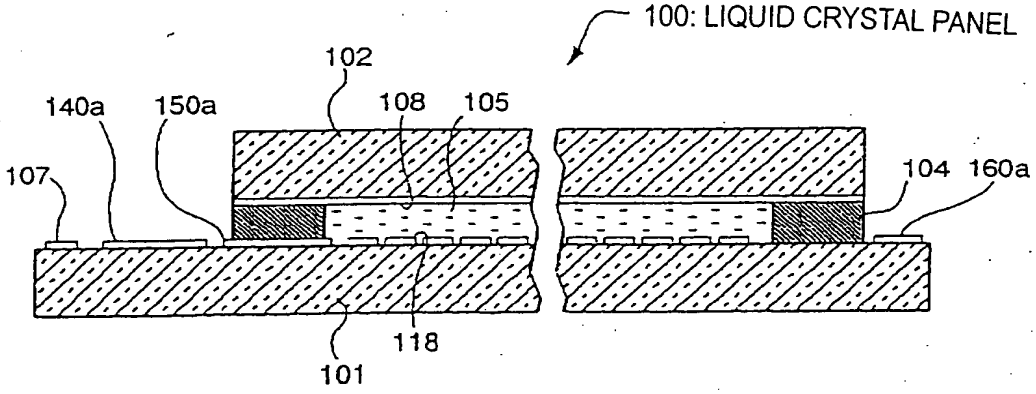

100: LIQUID CRYSTAL PANEL
102
140a
150a
108
105
107
104
160a
118
101

FIG. 2

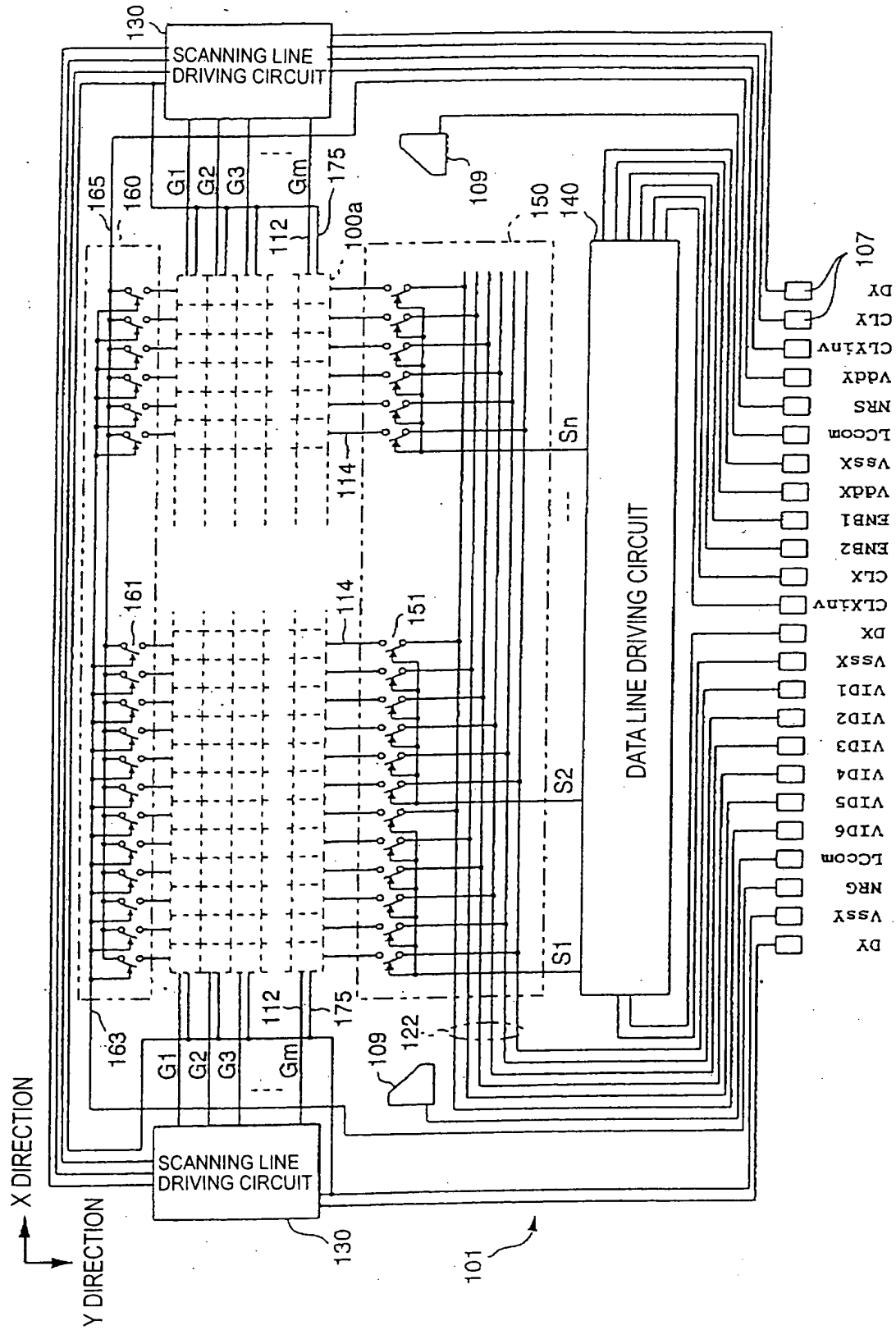

SCANNING LINE DRIVING CIRCUIT
130
G1
G2
G3
Gm
165
160
175
112
100a
109
150
140
107
DY
CLY
CLYinv
VddY
NRS
Lccom
VssX
VddX
ENB1
ENB2
CLX
CLXinv
DX
VssX
VID1
VID2
VID3
VID4
VID5
VID6
Lccom
NRG
VssY
DY
Sn
S2
S1
DATA LINE DRIVING CIRCUIT
161
114
151
163
122
SCANNING LINE DRIVING CIRCUIT
130
101
X DIRECTION
Y DIRECTION

FIG. 3

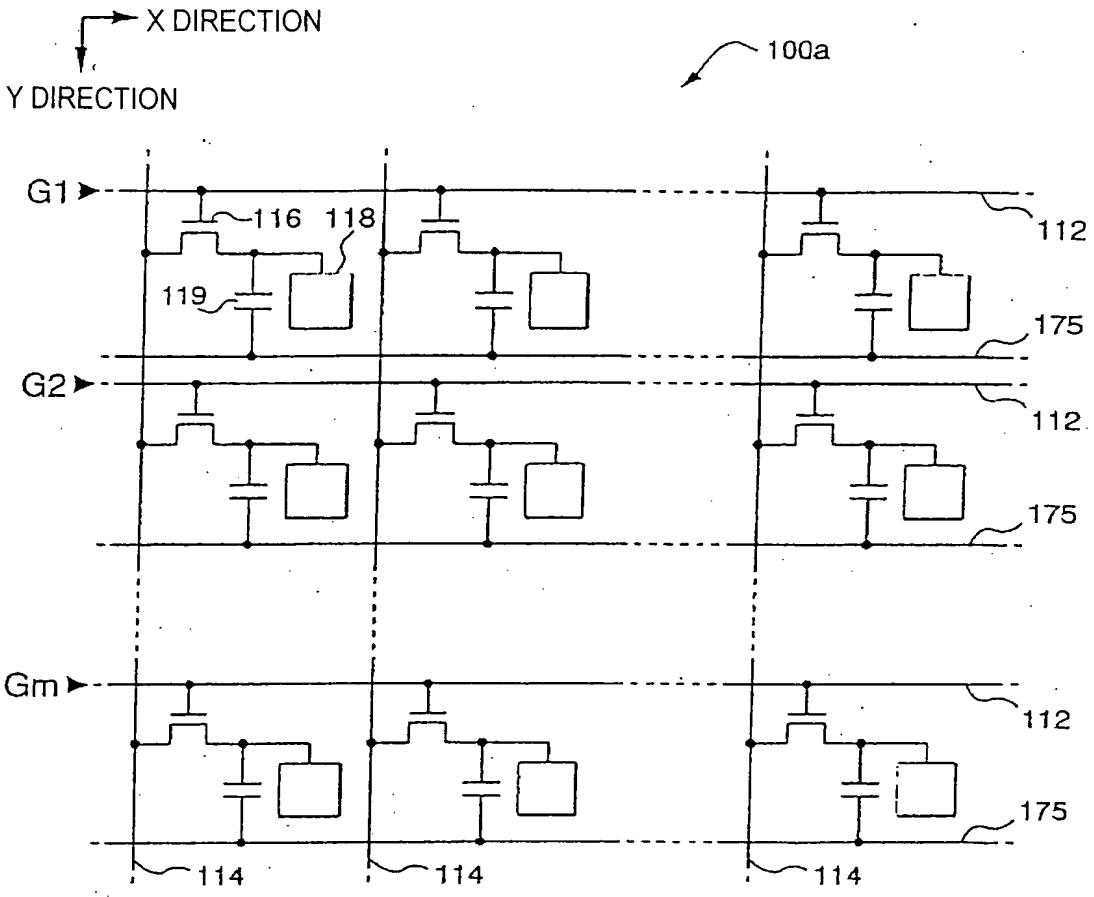


FIG. 4

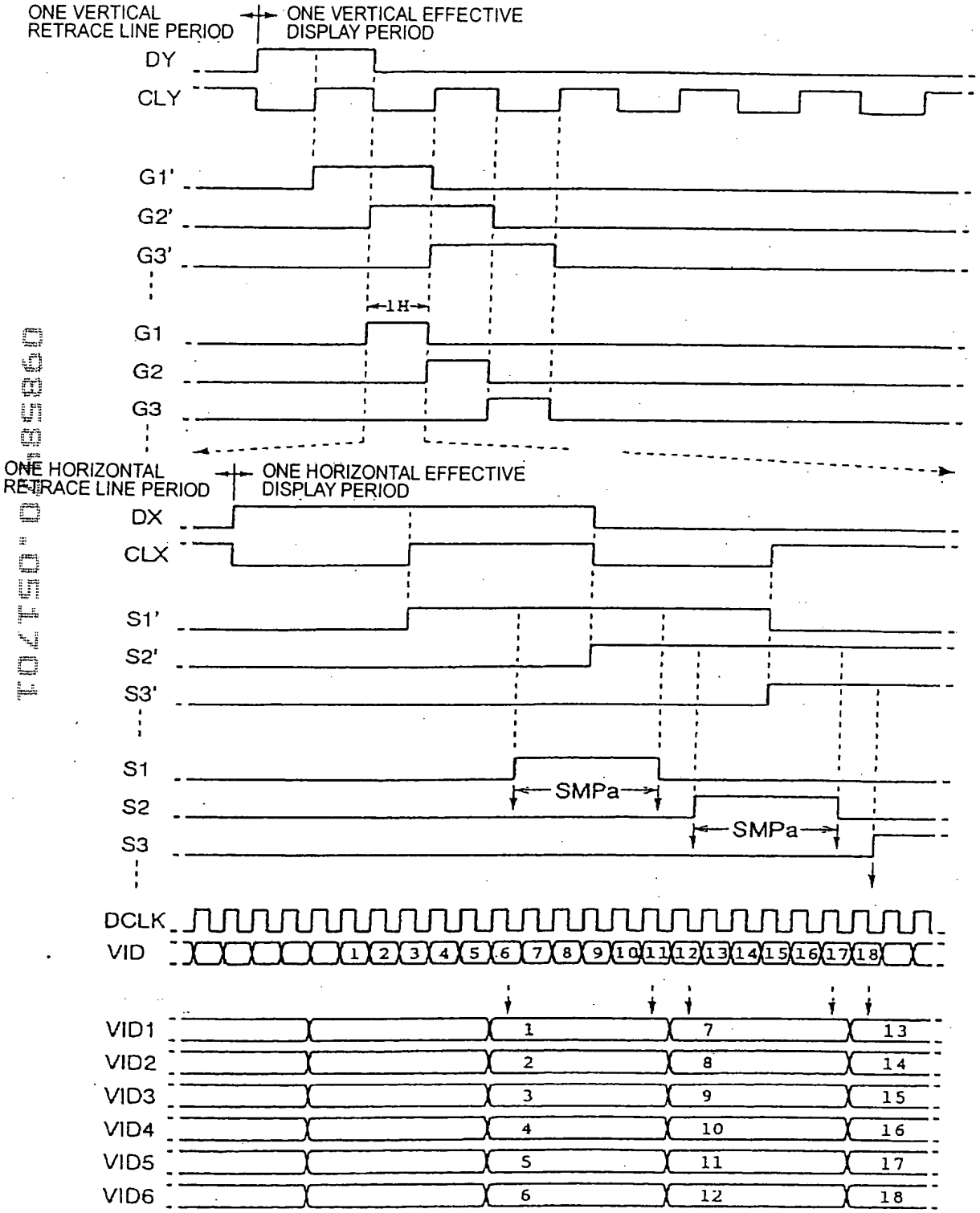

ONE VERTICAL RETRACE LINE PERIOD
ONE VERTICAL EFFECTIVE DISPLAY PERIOD
DY
CLY
G1'
G2'
G3'
1H
G1
G2
G3
ONE HORIZONTAL RETRACE LINE PERIOD
ONE HORIZONTAL EFFECTIVE DISPLAY PERIOD
DX
CLX
S1'
S2'
S3'
S1
S2
S3
SMPa
SMPa
DCLK
VID
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
VID1 1 7 13
VID2 2 8 14
VID3 3 9 15
VID4 4 10 16
VID5 5 11 17
VID6 6 12 18

FIG. 5

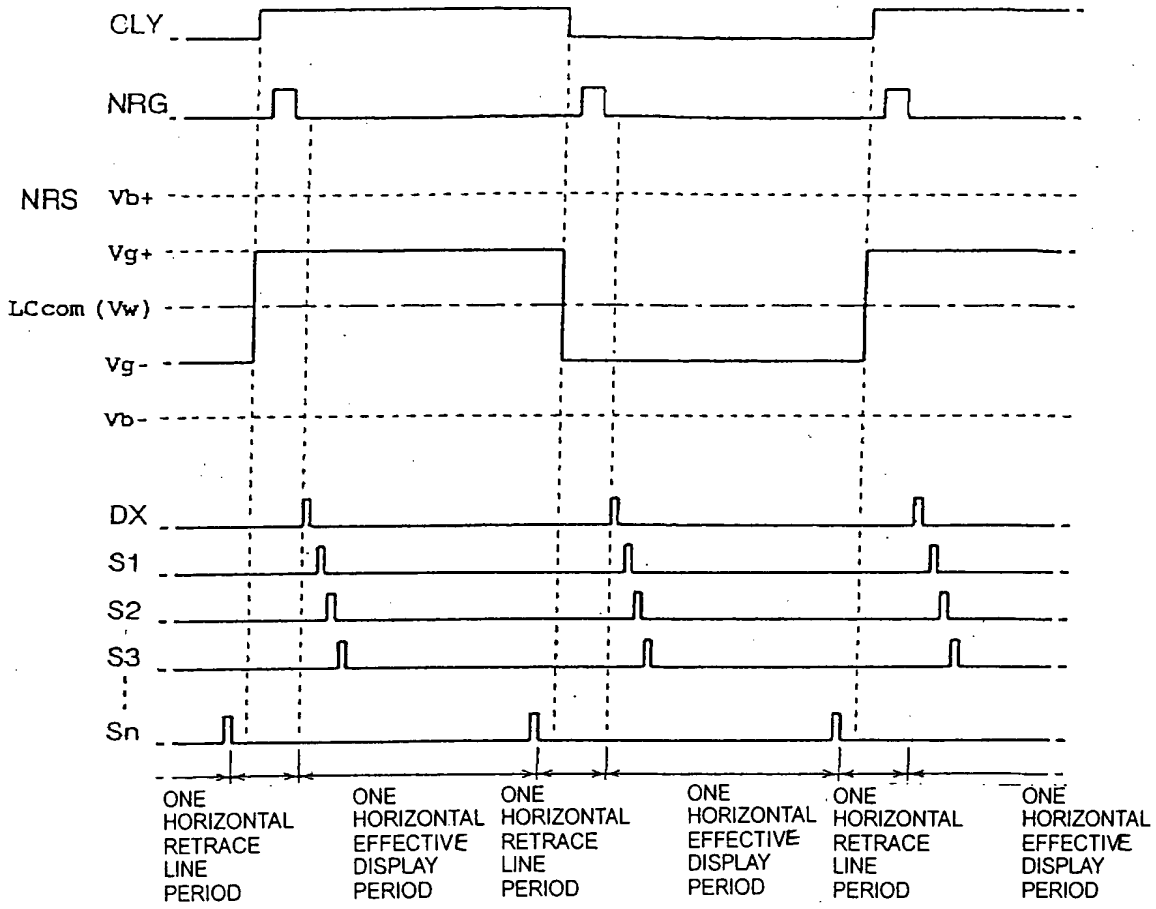


FIG. 6

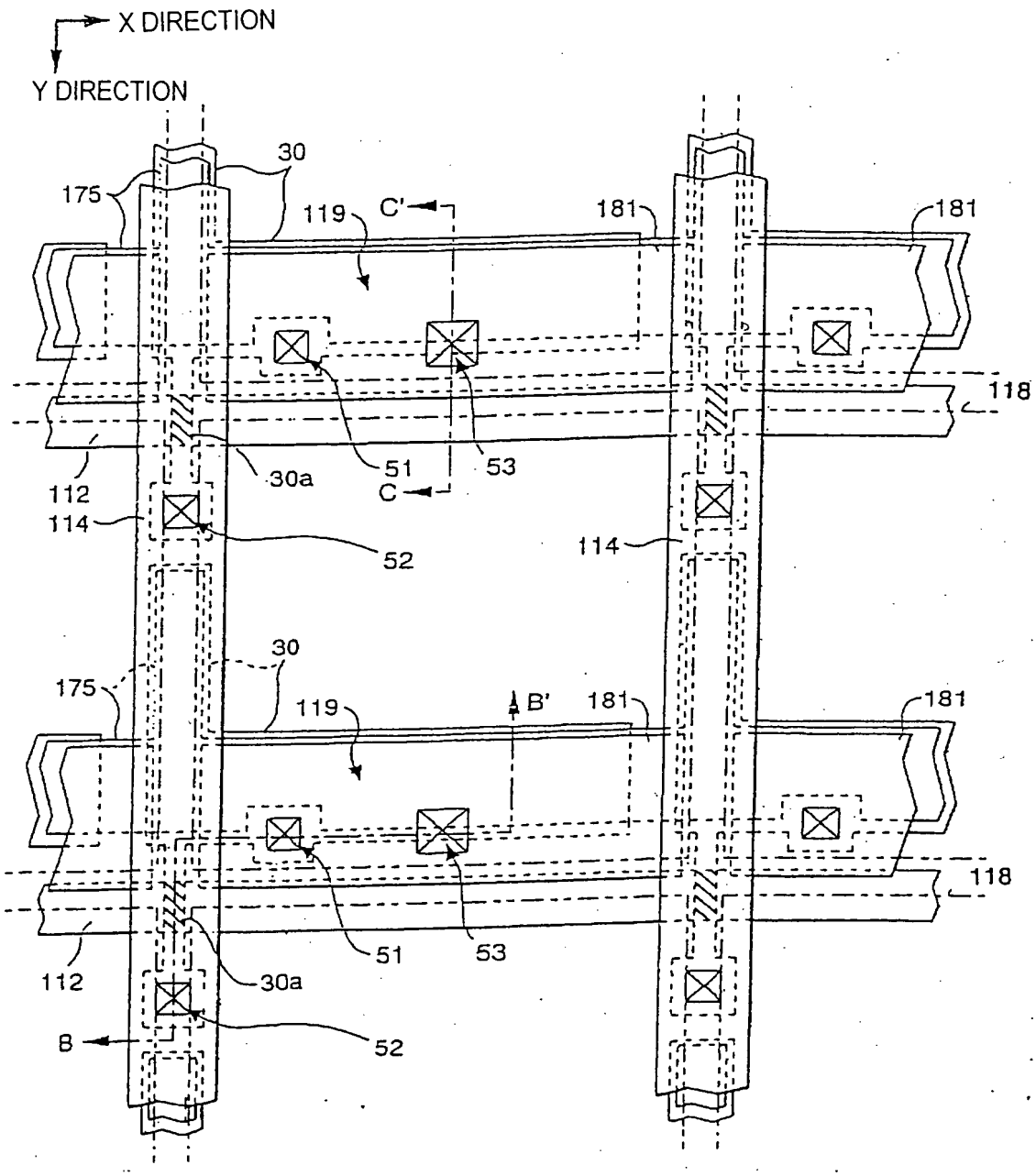
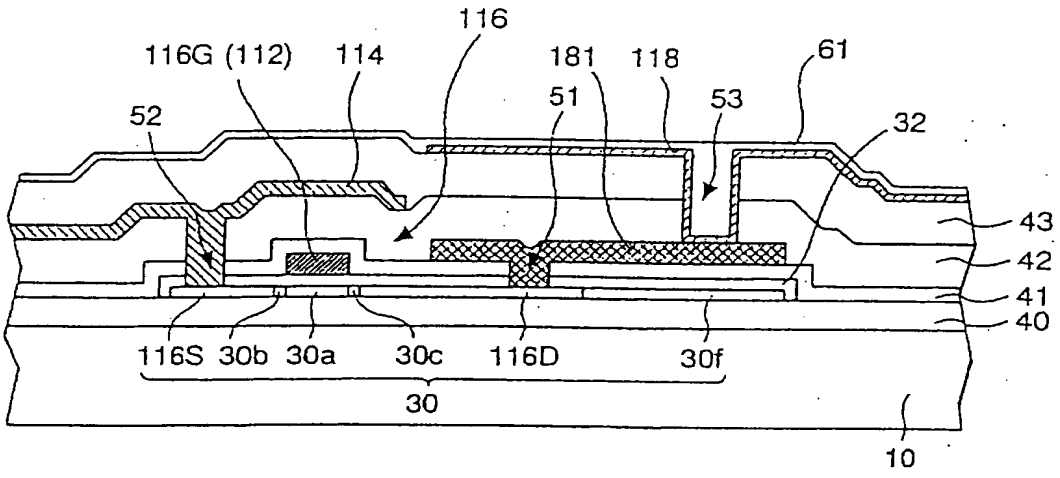
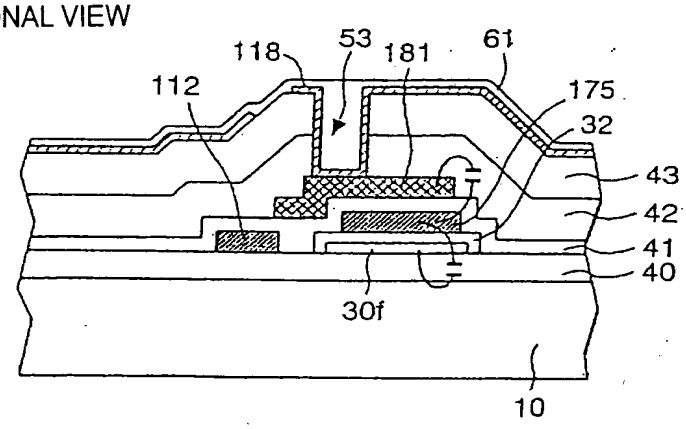

X DIRECTION
Y DIRECTION
30
175
119
C'
181
181
118
112
30a
51
53
C
114
52
114
30
175
119
B'
181
181
118
112
30a
51
53
B
52

FIG. 7

(a) LINE B-B' CROSS-SECTIONAL VIEW



(b) LINE C-C' CROSS-SECTIONAL VIEW



(c) EQUIVALENT CIRCUIT OF STORAGE CAPACITOR

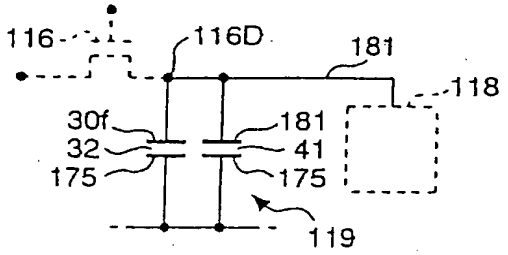


FIG. 8

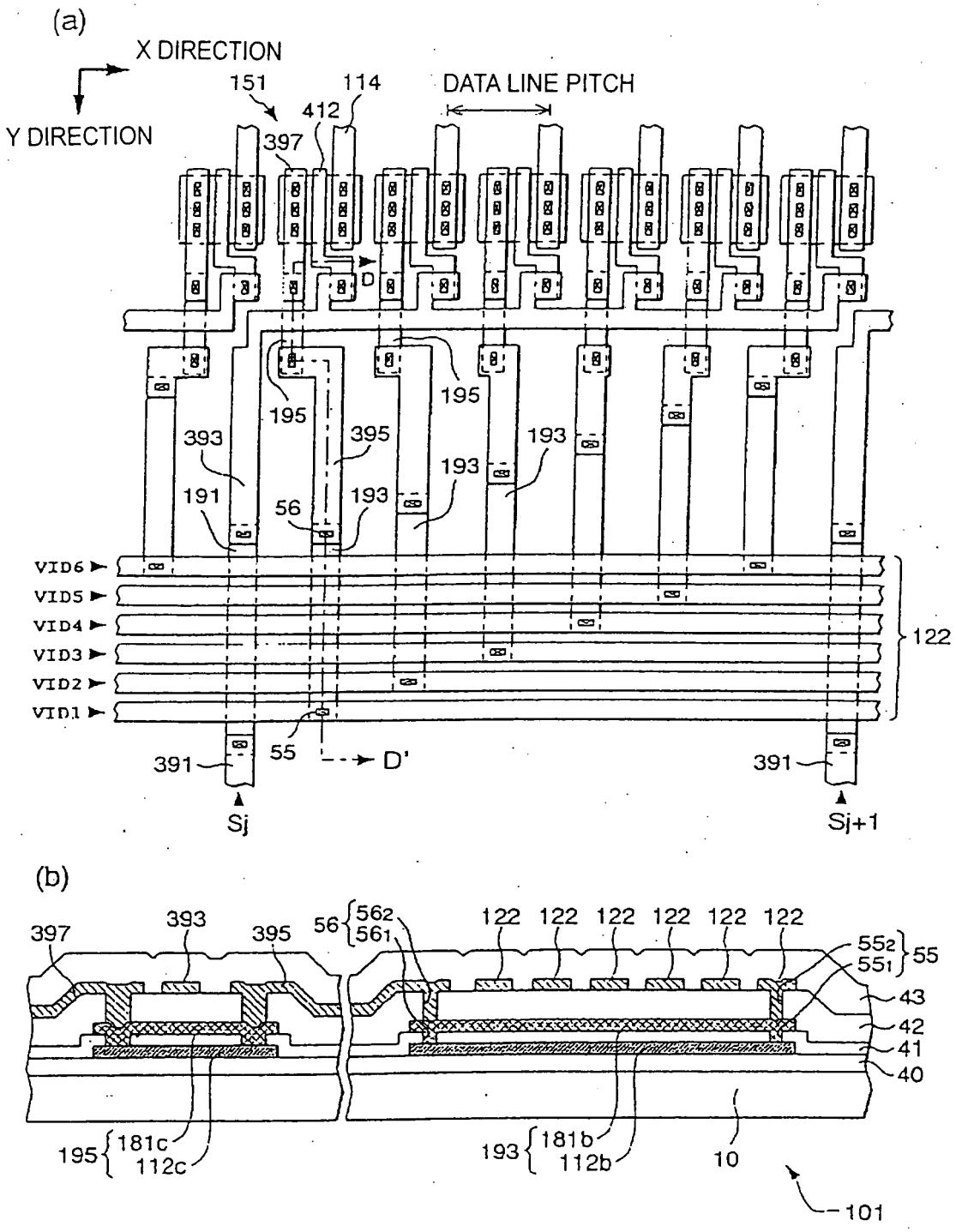
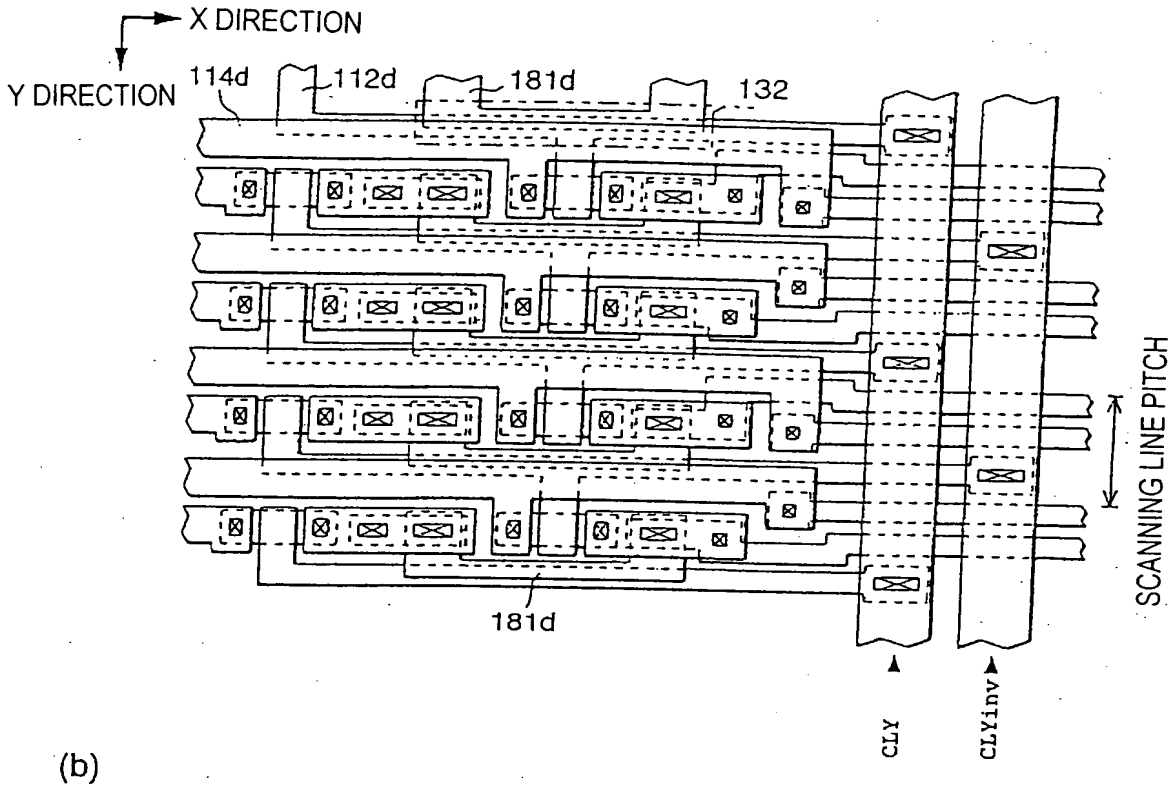

(a)
X DIRECTION
Y DIRECTION
151
114
412
397
DATA LINE PITCH
D
195
195
393
395
193
193
191
56
193
VID6
VID5
VID4
VID3
VID2
VID1
122
391
55
D'
391
Sj
Sj+1
(b)
397
393
395
56
562
561
122
122
122
122
122
122
552
551
55
43
42
41
40
195
181c
112c
193
181b
112b
10
101

FIG. 9

(a)


X DIRECTION
Y DIRECTION
114d
112d
181d
132
181d
SCANNING LINE PITCH
CLY
CLYinv

(b)

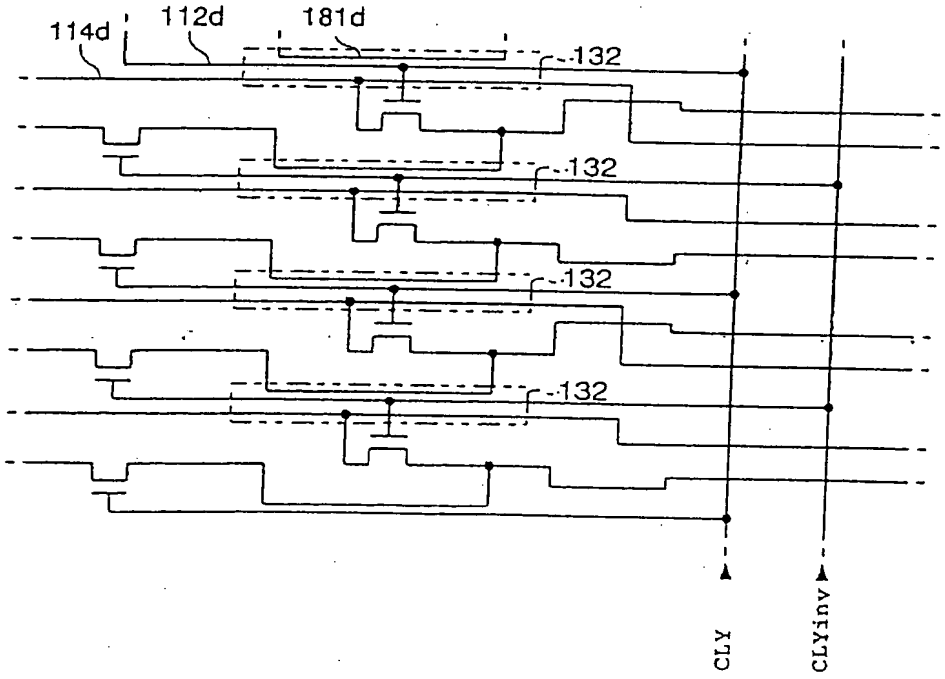
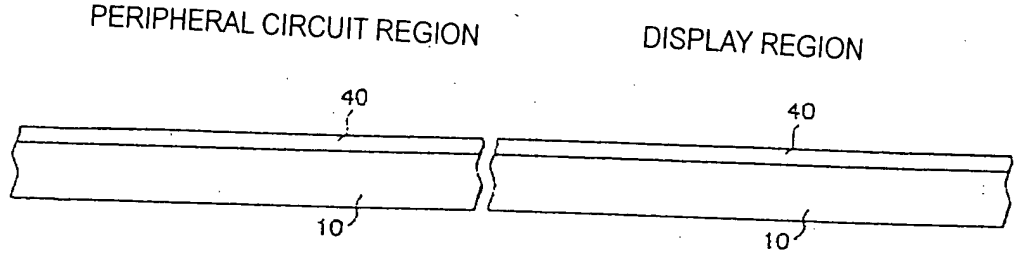
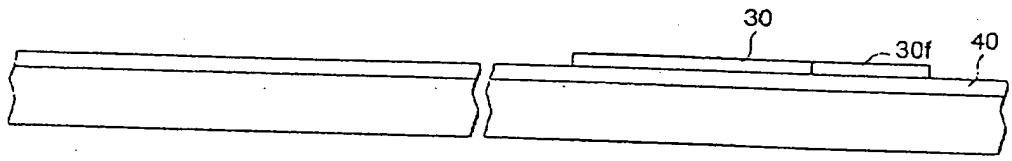

114d
112d
181d
132
132
132
132
CLY
CLYinv

FIG. 10

(1)



(2)



(3)

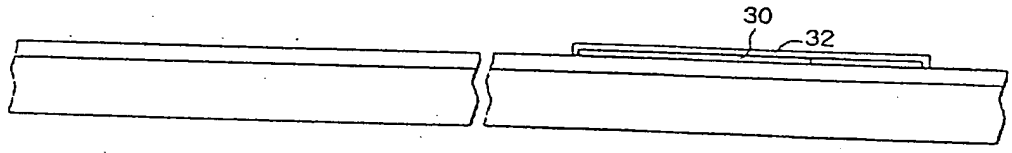
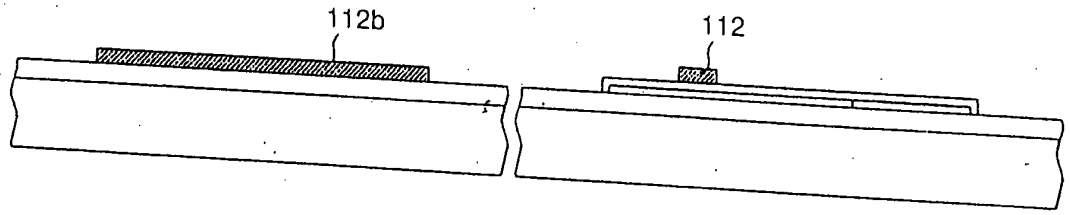
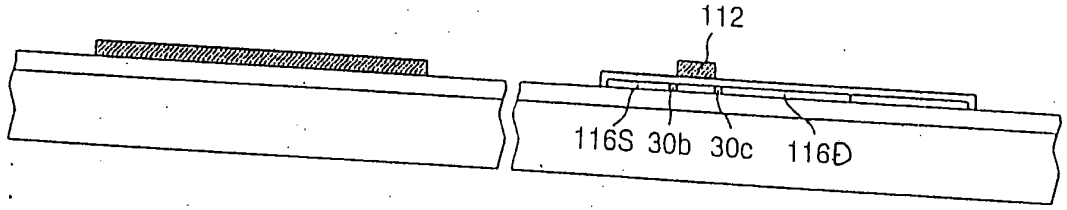


FIG. 11

(4)



(5)



(6)

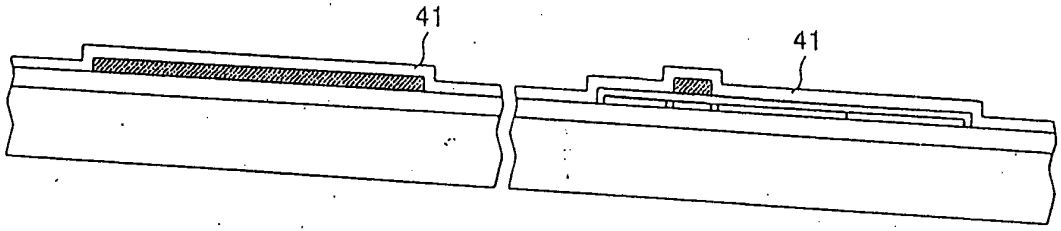
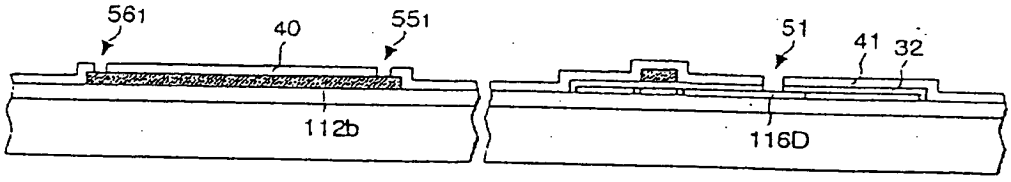
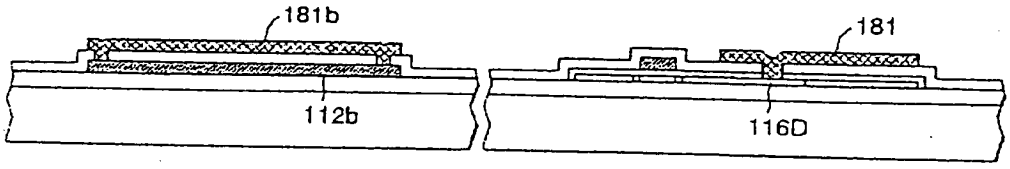


FIG. 12

(7)



(8)



(9)

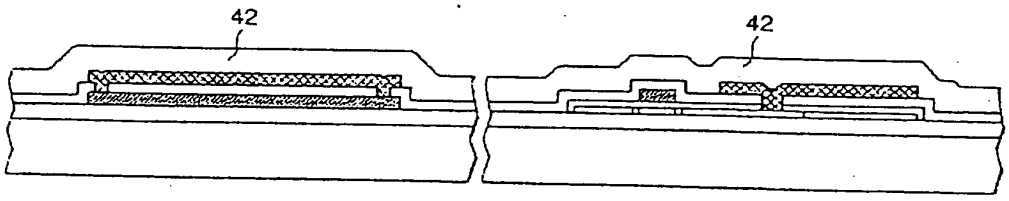
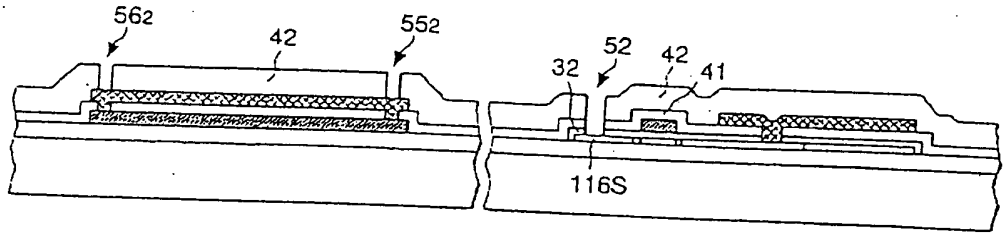
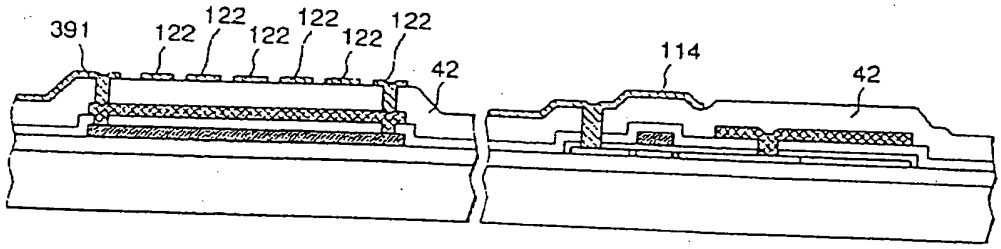


FIG. 13

(10)



(11)



(12)

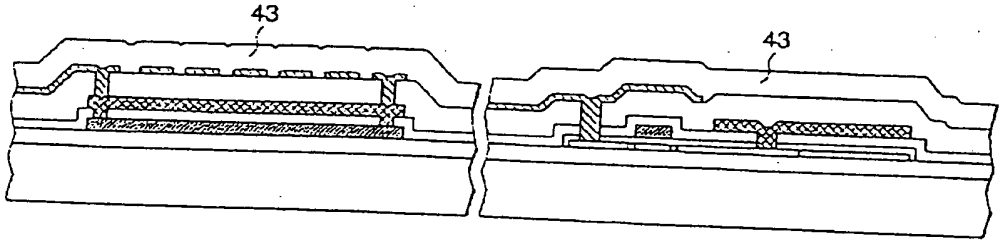
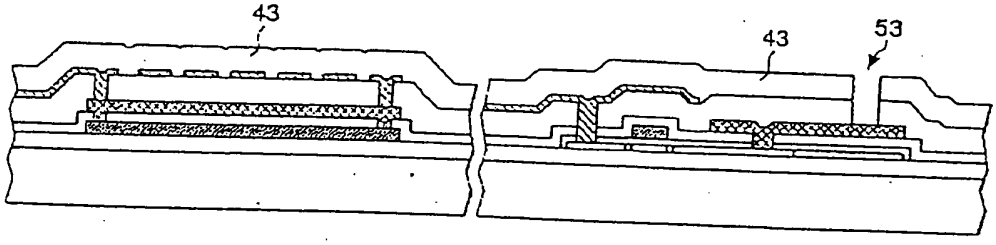


FIG. 14

(13)



(14)

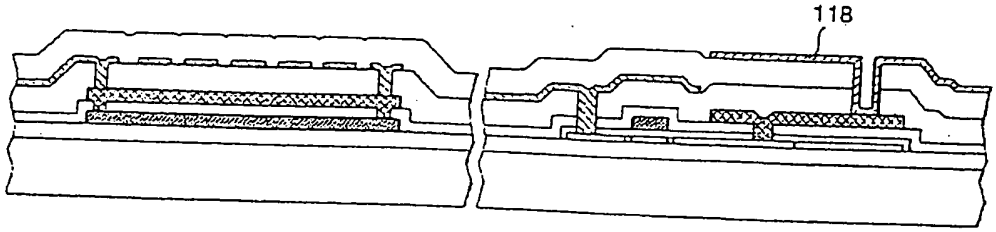
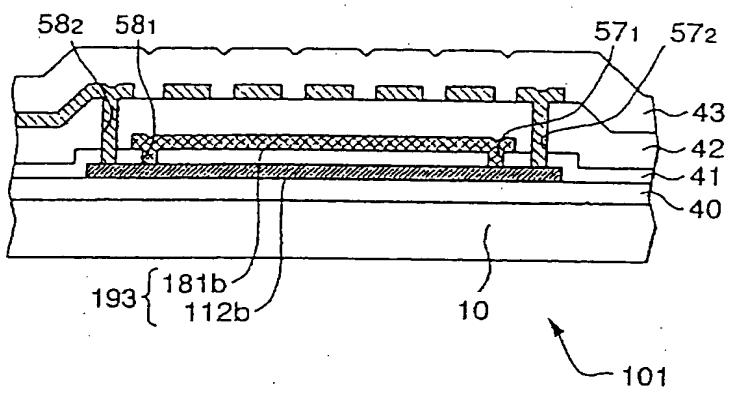


FIG. 15

(a)



(b)

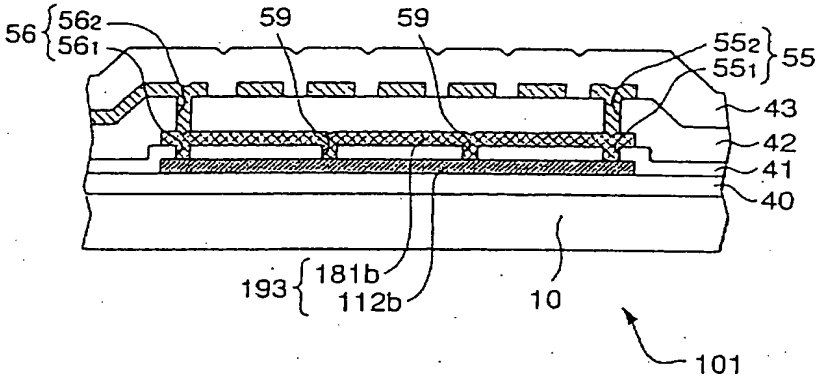


FIG. 16

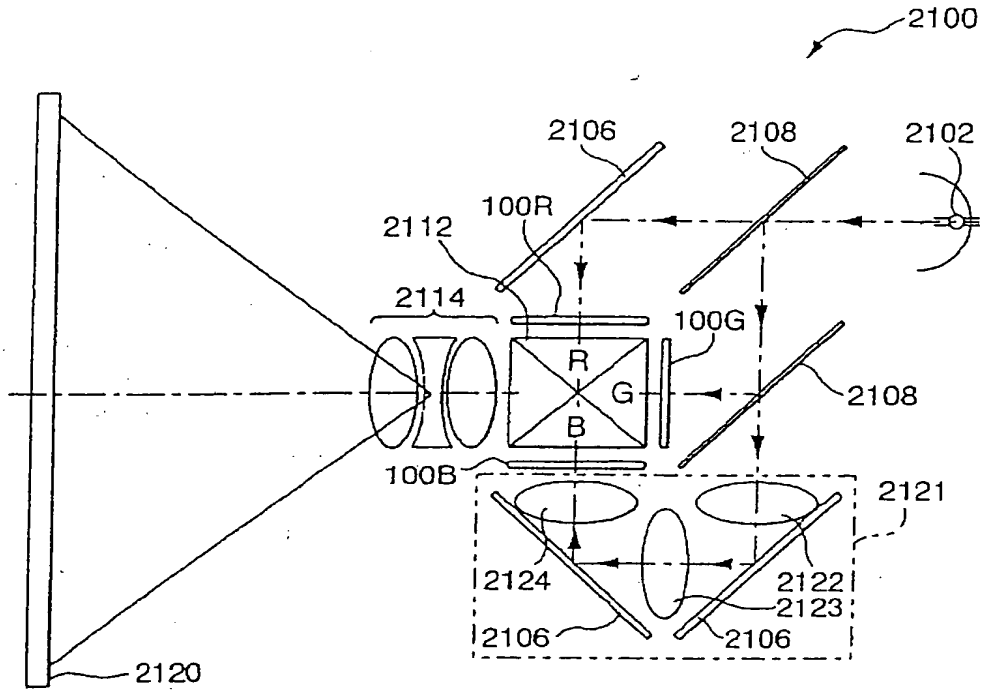

2100
2106
2108
2102
100R
2112
2114
100G
R
G
B
2108
100B
2121
2124
2122
2123
2106
2106
2120

FIG. 17

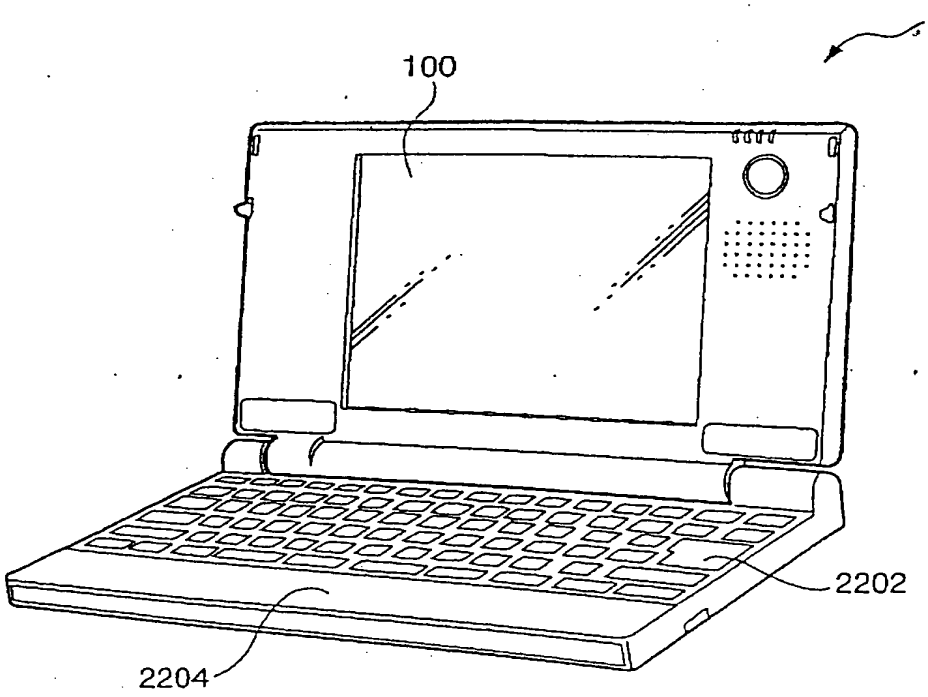

2200
100
2202
2204

FIG. 18